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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/044,293 | 01/11/2002 | Lars E.W. Nilsson | AWA-064XX | 6843 |

207 7590 09/17/2003

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BOSTON, MA 02109

EXAMINER

KYLE, MICHAEL J

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,293

Applicant(s)

NILSSON, LARS E.W.

Examiner

Michael J Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 21-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 7. 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-20, drawn to the method of manufacturing, classified in class 29, subclass 450.
 - II. Claims 21-32, drawn to the apparatus for manufacturing, classified in class 277, subclass 603.
 - III. Claims 33-43 drawn to the ventilation duct with a sealing gasket, classified in class 277, subclass 603.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process may be practiced by hand.
4. Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make other and materially different products, such as a installing a rubber coating, insulation, or attaching a clamping strap to pipe.

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5. Inventions II and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the apparatus may be used for making a different product such as metal rings, or clamping strips.

6. During a telephone conversation with Charles Gagnebin on May 6, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

7. Claim 16 recites the limitation “the tubular element end portion” in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests changing this to --an end portion of the tubular element--.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 1-5 and 9-13 rejected under 35 U.S.C. 102(b) as being anticipated by Suggs et al (U.S. Patent No. 5,499,827). Suggs et al discloses a method of manufacturing a tubular element having a sealing gasket comprising the steps of providing a continuous sealing strip (10), forming the sealing strip into a shape that essentially corresponds to a perimeter of the tubular element, cutting the sealing strip (10) into a sealing strip portion (30) having a length that essentially corresponds to the perimeter of the tubular element, joining together a first (32) and second (34) end of the sealing strip portion (“mating engagement”, column 5, line 32), and fastening the sealing gasket around the perimeter of the tubular element.

10. With respect to claim 2, Suggs et al discloses winding the sealing strip around a forming mandrel (94) having a perimeter that essentially corresponds to a perimeter of the tubular element, and after joining together the first and second ends of the sealing strip portion, transferring the sealing gasket onto the tubular element.

11. With respect to claim 3, Suggs et al discloses the step of forming the sealing strip comprises holding a first end of the sealing strip against a point on the perimeter of the forming mandrel. The examiner asserts that this must occur in order for the sealing strip to be retained on the mandrel.

12. With respect to claim 4, Suggs discloses the step of forming the sealing strip around a forming mandrel comprises rotating the forming mandrel (94) around a center axis of the tubular element so as to arrange the sealing strip around the perimeter of the forming mandrel.

13. With respect to claim 5, Suggs et al discloses arranging the first and second ends of the sealing strip portion adjacent each other and held against the forming mandrel. Kemminer (U.S. Patent No. 3,608,347) is cited as evidence to show how material around a forming mandrel can

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be cut to length. The examiner asserts that after the cut, the first and second ends are adjacent one another on the mandrel.

14. With respect to claim 9, Suggs et al discloses that providing sealing strip comprises providing a continuous sealing strip.

15. With respect to claim 10, Suggs et al discloses the step of providing a sealing strip comprises feeding the sealing strip from a supply of such sealing strip (12).

16. With respect to claim 11, Suggs et al discloses the step of cutting the sealing strip comprises cutting it into a length which is essentially equal to the circumference of a portion of the tubular element. Kemminer is again cited as an evidentiary reference for the cutting process.

17. With respect to claim 12, Suggs et al discloses the step of joining together the first and second ends of the strip portion comprises arranging them adjacent each other so as to provide a sealing gasket having a continuous profile (figure 3).

18. With respect to claim 13, Suggs et al discloses the step of joining together the first and second ends of the strip portion comprises arranging them in an overlapping manner. The examiner notes that because ends 32 and 34 of Suggs et al are cut diagonally, that they overlap.

19. Claims 1, 6-10, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Steenstrup (U.S. Patent No. 1,498,894). Steenstrup discloses a method of manufacturing a tubular element having a sealing gasket comprising the steps of providing a continuous sealing strip (17), forming the sealing strip into a shape that essentially corresponds to a perimeter of the tubular element, cutting (page 2, lines 112-116) the sealing strip (17) into a sealing strip portion having a length that essentially corresponds to the perimeter of the tubular element, joining

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together a first and second end of the sealing strip portion (by way of tubular piece 12), and fastening the sealing gasket around the perimeter of the tubular element (in groove 16).

20. With respect to claims 6-7, Steenstrup discloses forming the sealing strip comprises winding the sealing strip around a perimeter of the tubular element, and forming the sealing strip comprises rotating the tubular element (12) around a center axis.

21. With respect to claims 8-10, Steenstrup discloses the step of arranging the first and second ends of sealing strip adjacent each other, providing a continuous sealing strip, and feeding the sealing strip from a supply of such feeding strip (figure 1).

22. With respect to claim 14, Steenstrup discloses the joining of the first and second ends to of the strip portion to comprise a welding operation or a heat treatment process.

23. With respect to claim 16, Steenstrup discloses the fastening step to comprise providing a circumferential groove (16) in the tubular element and arranging the sealing strip in the groove.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suggs et al in view of Knapp (U.S. Patent No. 6,550,775). Suggs et al recites all of the limitations of claim 1, but fails to disclose the first and second ends of the strip portion being joined by one a gluing operation, a vulcanization operation, a welding operation, or a heat treatment operation.

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26. Knapp teaches a gasket with its ends joined together by gluing or vulcanization (column 5, lines 3-5) in order to securely form an annular gasket. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suggs et al as taught by Knapp in order to securely form an annular gasket.

27. Claims 15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suggs et al in view of Ahlrot (U.S. Patent No. 3,955,834). Suggs et al recites all of the limitations of claim 1, but fails to disclose the fastening the sealing strip by clamping it to the tubular element, fastening the sealing strip by folding an edge portion of the tubular element so as to squeeze the sealing strip, or that the tubular element is ventilation duct component that comprises a thin walled metal structure.

28. Ahlrot teaches a tubular element having a sealing strip (32 and 72) around its periphery that is fastened to the tubular element by clamping the sealing strip to the tubular element (figure 9, clamped with strip 73 and weld 78) or by folding over and edge portion of the tubular element (36a) so as to squeeze the sealing strip (32, figure 5). Ahlrot uses these methods of fastening a sealing to a tubular element because they are simple and effective to manufacture and assemble (column 1, lines 25-26). Ahlrot further teaches the tubular the element to be a ventilation duct component comprising a thin walled metal structure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suggs et al as taught by Ahlrot in order to fasten a sealing element to a tubular element simply and effectively.

29. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suggs et al in view of Heisler (U.S. Patent No. 4,398,726). Suggs et al recites all of the limitations of claim 1

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above, but fails to disclose the sealing strip is fastened to the tubular member by adhering it to the tubular member.

30. Heisler teaches a tubular member (2) with an annular gasket (3) that is adhered (column 2, lines 4-5) to the tubular member. Heisler does this to secure the gasket in the necessary position on the outer portion of the tube with little no structural modification to the tubular element. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suggs et al as taught by Heisler in order to secure the sealing strip in place without modifying the structure of the tubular element.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are cited to further show the state of the art with respect to methods of placing seals or gasket around pipes or other elements: Forni, Adam, Menzel, Mercurio et al, Suggs et al (U.S. Patent No. 5,609,708), Kogler et al (U.S Patent No. 6,464,229), and Kogler et al (U.S. Patent No. 6,520,505).

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Kyle whose telephone number is 703-305-3614. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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34. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

mk

A handwritten signature in black ink, appearing to read "Anthony Knight", with a stylized flourish at the end.

Anthony Knight
Supervisory Patent Examiner
Tech Center 3600